Pipeline System: Operator:				
Location:	Date of Occurrence:			
Medium Released:	Quantity:			
PHMSA Arrival Time & Date:	Total Damages \$			
Investigation Responsibility: State	e PHMSA NTSB Other			
Company Reported Apparent Cause:	Corrosion Excavation			
Natural Forces	Incorrect Operation			
Material and/or Welds	Equipment and Operations Other			
Rupture Yes No Leak Yes No Fire Yes No Explosion Yes No Evacuation Yes No	Number of Persons Area			
	Narrative Summary			
Short summary of the Incident/Accident which will g facts.	give interested persons sufficient information to make them aware of the basic scenario and			

Region/State Principal Investigator:	Reviewed by: Title:				
Date:	Date:				
	on & Response				
Location (City, Township, Range, County/Parish):	(Acquire Map)				
Address or M.P. on Pipeline: (1)	Type of Area (Rural, City):				
-					
Date:	Time of Failure:				
Time Detected:	Time Located:				
How Located:					
NRC Report #: (Attach Report) Time Reported to N	RC: Reported by:				
(Time Reports) Time Reported to The	Tepoted by:				
Type of Pipeline:					
Gas Distribution Gas Transmission	Hazardous Liquid LNG				
LP Interstate Gas  Municipal Intrastate Gas	Interstate Liquid LNG Facility				
Municipal Intrastate Gas  Public Utility Jurisdictional Gas Gather	Intrastate Liquid  Offshore Liquid				
Junistictional Gas Gauter	Offshore Edding				

1 Photo documentation

	Failure Location & Response					
Master Meter	Offshore Gas		Jui	risdictional	Liquid Gathering	
	Offshore Gas - High H <sub>2</sub> S	3		$O_2$		
Pipeline Configuration (Regulator St.	ation, Pump Station, Pipelin	ne, etc.	):			
_						
	Operator/Own	T				
Owner:		_	rator:			
Address:		Add	ress:			
Company Official:			npany Offic	ial:		
Phone No.: Fax	No.:	Pho	ne No.		Fax No.	
	Drug and Alcohol To	esting I	Program Con	tacts	∐ N/A	k.
Drug Program Contact & Phone:						
Alcohol Program Contact & Phone:						
	Dan	nages				
Product/Gas Loss or Spill <sup>(2)</sup>		Estir	nated Prope	erty Dam	age \$	
Amount Recovered		Asso	ociated Dan	nages <sup>(3)</sup> \$		
Estimated Amount \$						
Description of Property Damage:		•				
Customans out of Comica.		NT.	N	na h a m		
Customers out of Service:	∐ Yes ☐	No No		mber:		
Suppliers out of Service:	Yes	No	INUI	mber:	<del></del>	
	Fatalities d	and In	ijuries			
Fatalities:	Yes No C	Compa	ny:	Co	ontractor: Public:	
Injuries - Hospitalization:	Yes No C	Compa	ny:	Co	ontractor: Public:	
Injuries - Non-Hospitalization:	Yes No C	Compa	ny:	Co	ontractor: Public:	
Total Injuries (including Non-Hospit	talization):	Compa	ny:	Co	ontractor: Public:	
			Yrs w/	Yrs.		
Name	Job Function		Comp.	Exp.	Type of Injury	

<sup>2</sup> Initial volume lost or spilled 3 Including cleanup cost

	F	atalities and	d Injuries			
	D	rug/Alcoho	l Tostina			□ N/A
Were all employees that coul				ted within t	he 2 hour tii	
the 32 hour time frame for all  Yes No		meident, po	st accident tes	ted within t	ne 2 nour th	the frame for alcohol of
T.1.D.	T . D . 0 T'			R	esults	T CD
Job Function	Test Date & Time	L	ocation	Pos	Neg	Type of Drug
		System Des	cription			
Describe the Operator's Syste	em:					
	Pi	ipe Failure	Description			□ N/A
Length of Failure (inches, fee	et, miles):					(1)
Position (Top, Bottom, include position on pipe, 6 O'clock): (1) Description of Failure (Corrosion Gouge, Seam Split): (1)						
Laboratory Analysis:	Yes No					
Performed by:	m on Common serts	x7	] <sub>N</sub>			
Preservation of Failed Section If Yes - Method:	n or Component:	Yes	No			
In Custody of:						

	Pipe Failure Description N/A							
Develop a sketch of the area including distances from roads, houses, stress inducing factors, pipe configurations, etc. Bar Hole Test Survey Plot should be outlined with concentrations at test points. Direction of Flow.								
Component Failure Description N/A								
Component Failed:		*		•		(1)		
Manufacturer:			Model:					
Pressure Rating: Size:								
Other (Breakout Tanl	Other (Breakout Tank, Underground Storage):							
		Pipe D	)ata			□ N/A		
Material:			Wall Thickn	ness/SDR:				
Diameter (O.D.):			Installation 1	Date:				
SMYS:			Manufacture	er:				
Longitudinal Seam:			Type of Coa	nting:				
Pipe Specifications (A	API 5L, ASTM A53, etc.):							
		Join	ing			□ N/A		
Type:			Procedure:					
NDT Method:			Inspected:	Yes I	No			
	Pressure @	Time of Fa				□ N/A		
Pressure @ Failure S				@ Failure Site:	· · ·			
	Pressure Readings @ Va					om Failure Site		
Locatio	on/M.P./Station #	Pressure	e (psig)	Elevation (ft msl)	Upstream	Downstream		
	Upst	tream Pump	o Station D	ata		□ N/A		
Type of Product:		<del></del>	API Gravity			_		
Specific Gravity: Flow Rate:								

Upstream Pump Station Data N/A								
Pressure @ Time of Failure (4)	Distance to Failure Site:							
High Pressure Set Point:	Low Pressure Set Point:							
Upstream Compre	Upstream Compressor Station Data							
Specific Gravity:	Flow Rate:							
Pressure @ Time of Failure (4)	Distance to Failure Site:							
High Pressure Set Point:	Low Pressure Set Point:							
	ng Pressure N/A							
Max. Allowable Operating Pressure:	Determination of MAOP:							
Actual Operating Pressure:								
Method of Over Pressure Protection:								
Relief Valve Set Point:	Capacity Adequate? Yes No							
Integrity Tes	st After Failure							
Pressure Test Conducted in place? (Conducted on Failed Compo	onents or Associated Piping): Yes No							
If NO, Tested after removal?	Yes No							
Method:								
Describe any failures during the test.								
Soil/water Condit	ions @ Failure Site							
Condition of and Type of Soil around Failure Site (Color, Wet,	Dry, Frost Depth):							
Type of Backfill (Size and Description):								
Type of Water (Salt, Brackish):	Water Analysis (5) Yes No							
External Pipe or Comp	ponent Examination N/A							
External Corrosion? Yes No	Coating Condition (Disbonded, Non-existent):							
Description of Corrosion:								
Description of Failure Surface (Gouges, Arc Burns, Wrinkle Bends, Cracks, Stress Cracks, Chevrons, Fracture Mode, Point of Origin):								

<sup>4</sup> Obtain event logs and pressure recording charts 5 Attach copy of water analysis report

External Pipe or Comp	oonent Examination	N/A
Above Ground: Yes No	Buried: Yes No	(1)
Stress Inducing Factors: (1)	Depth of Cover:	(1)
Cathodio	c Protection	N/A
P/S (Surface):	P/S (Interface):	
Soil Resistivity: pH:	Date of Installation:	
Method of Protection:		
Did the Operator have knowledge of Corrosion before the Incide	ent? Yes No	
How Discovered? (Close Interval Survey, Instrumented Pig, Ann	nual Survey, Rectifier Readings, ECDA, etc):	
Indexes of Discover Co.	English Company	37/4
Internal Pipe or Con  Internal Corrosion: Yes No	Injected Inhibitors: Yes No	N/A
Type of Inhibitors:	Testing: Yes No	
- 5, F v =	resuling.	
Results (Coupon Test, Corrosion Resistance Probe):		
Description of Failure Surface (MIC, Pitting, Wall Thinning, Ch	payrons Fracture Mode Point of Origin).	
Description of Panule Surface (MIC, Fitting, Wait Tillinning, Ch	levions, Practure Mode, Point of Origin).	
Cleaning Pig Program: Yes No	Gas and/or Liquid Analysis: Yes No	
Results of Gas and/or Liquid Analysis (6)		
Internal Inspection Survey: Yes No	Results (7)	
Did the Operator have knowledge of Corrosion before the Incide	ent? Yes No	
How Discovered? (Instrumented Pig, Coupon Testing, ICDA, et	c.):	

<sup>6</sup> Attach copy of gas and/or liquid analysis report 7 Attach copy of internal inspection survey report

Outside Force Damage				
Responsible Party:	Telephone No.:			
Address:				
Work Being Performed:				
Equipment Involved: (1)	Called One Call System? Yes No			
One Call Name:	One Call Report # (8)			
Notice Date:	Time:			
Response Date:	Time:			
Details of Response:				
Was Location Marked According to Procedures? Yes	No			
Pipeline Marking Type: (1)	Location: (1)			
State Law Damage Prevention Program Followed? Yes	No No State Law			
Notice Required: Yes No Resp	onse Required: Yes No			
Was Operator Member of State One Call? Yes No Was	Operator on Site? Yes No			
Did a deficiency in the Public Awareness Program contribute to the acc	cident? Yes No			
Is OSHA Notification Required? Yes No				
Natural Fo  Description (Earthquake, Tornado, Flooding, Erosion):	rces N/A			
Description (Earthquake, Tornado, Produing, Erosion).				

8 Attach copy of one-call report

Failur	re Isolation
Squeeze Off/Stopple Location and Method:	(1)
Valve Closed - Upstream:	I.D.:
Time:	M.P.:
Valve Closed - Downstream:	I.D.:
Time:	M.P.:
Pipeline Shutdown Method: Manual Auto	omatic SCADA Controller ESD
Failed Section Bypassed or Isolated:	
Performed By:	Valve Spacing:
	rization \[ \sum N/A
Gas Odorized: Yes No	Concentration of Odorant (Post Incident at Failure Site):
Method of Determination: Yes No	% LEL: Yes No % Gas In Air: Yes No
	Time Taken: Yes No
Was Odorizer Working Prior to the Incident?	Type of Odorizer (Wick, By-Pass):
∐ Yes ☐ No	
Odorant Manufacturer:	Type of Odorant:
Model:	
Amount Injected:	Monitoring Interval (Weekly):
Odorization History (Leaks Complaints, Low Odorant Levels, N	Monitoring Locations, Distances from Failure Site):
L	
Weather	Conditions N/A
Temperature:	Wind (Direction & Speed):
Climate (Snow, Rain):	Humidity:
Was Incident preceded by a rapid weather change? Yes	□ No
Weather Conditions Prior to Incident (Cloud Cover, Ceiling Hei	ghts, Snow, Rain, Fog):

Gas Migration Survey							□ N/A			
Bar Hole Test o	f Area:	Yes N	О		Е	Equipment U	Jsed:			
Method of Surv	ey (Founda	ntions, Curbs, Ma	anholes, l	Driveway	s, Mai	ns, Service	s) <sup>(9)</sup>			(1)
			Em	inonma	at Com	aitivitu Im	naat			N/A
Location (Neare	Location (Nearest Rivers, Body of Water, Marshlands, Wildlife Refuge, City Water Supplies that could be or were affected									
by the medium		, , , , , , , , , , , , , , , , , , ,		,						
OPA Contingen	cy Plan Av	ailable? \( \sum_{\text{Y}}	es [	No	F	ollowed?	Ye	s No		
			1 7	· /TT	. 1 0		4			
Cl. I.	1 🗆		$\overline{}$	cation/H	1	onsequenc	ce Are			N/A N/A
Class Location: Determination:	1 2	2 3 .	4 🔲			ICA Area? Determination	on:	∐Yes [	No	N/A
Odorization Rec	quired?	Yes	No	N/.	A					
				D	. T	. II:				□ NI/A
				Pressur (Expand 1		Necessary)				∐ N/A
		Req'd (10)Asse		Test D	)ate	Test Med	dium	Pressure	Duration	% SMYS
		Deadline D	Date	Test L	raic	Test Wice	ııuııı	(psig)	(hrs)	70 SW113
Installation		N/A								
Next										
Next Days										
Most Recent		<u> </u>								
Describe any pro	oblems exp	erienced during	the press	ure tests.						
		Interna	ıl Line I	Inspectio	n/Oth	er Assessi	ment l	History		N/A
				_		Vecessary)				
		Assessment adline Date		ssment	Тур	oe of ILI ool (11)		ner Assessmer Method <sup>(12)</sup>		cated Anomaly
	Dea	idille Date	L	Date	1	001		Method		, describe below
Initial										Yes No
Next									+=-	Yes No
Next									Y	es No

<sup>9</sup> Plot on site description page

<sup>10</sup> As required of Pipeline Integrity Management regulations in 49CFR Parts 192 and 195

<sup>11</sup> MFL, geometry, crack, etc.

<sup>12</sup> ECDA, ICDA, SCCDA, "other technology," etc.

Internal Line Inspection/Other Assessment History (Expand List as Necessary)							
Most Recent					Yes	☐ No	
Describe any preactions.	eviously indicated anomalies	at the failed pipe	e, and any subsequ	nent pipe inspections (an	nomaly digs) an	d remedial	
	j	Pre-Failure Co	onditions and Ac	ctions		N/A	
_	wn pre-failure condition requ be below or on attachment)	iring <sup>(10)</sup> the ope	rator to schedule e	evaluation and remediati	on?	-	
remediation sche	a known pre-failure condition a known pre-failure condition and a condition are conditionally as a conditional are conditional are conditionally as a conditional are conditional are conditional are conditionally as a conditional are conditional a	attachment. [	Yes	No N/A			
the cause of this List below or on	Prior to the failure, had the operator performed the required (10) actions to address the threats that are now known to be related to the cause of this failure?  Yes  No  N/A  List below or on an attachment such operator-identified threats, and operator actions taken prior to the accident.						
Describe any preactions.	eviously indicated anomalies	at the failed pip	e, and any subsequ	ent pipe inspections (an	nomaly digs) an	d remedial	
		Mans	& Records			□ N/A	
Are Maps and R Comments:	Records Current? (13)	Yes	No				
		Leak	Survey History			N/A	
Leak Survey Hi	story (Trend Analysis, Leak l	Plots):	•				
			Operation Histo	ry		N/A	
Description (Re	pair or Leak Reports, Expose	d Pipe Reports)	:				
Did a Safety Re	lated Condition Exist Prior to	Failure?	Yes No	o Reported?	Yes	No	
Unaccounted Fo	or Gas:						

13 Obtain copies of maps and records

Pipeline Operation History							
Over & Short/Line Balance (24 hr., Weekly, Monthly/Trend):							
	Operator/Contractor E	Error		N/A			
Name:	Operation Constactor E	Job Function:		14/21			
Title:		Years of Experience	ce:				
Training (Type of Training, Background	l):	-					
Was the person "Operator Qualified" as		al operating condition	on? Yes N	No N/A			
Was qualified individual suspended from				<u> </u>			
Type of Error (Inadvertent Operation of	a Valve):						
Procedures that are required:							
Actions that were taken:							
Pre-Job Meeting (Construction, Mainter	nance, Blow Down, Purging, Isola	tion):					
Prevention of Accidental Ignition (Tag	& Lock Out, Hot Weld Permit):						
Procedures conducted for Accidental Ign	nition:						
Was a Company Inspector on the Job?	Yes No						
Was an Inspection conducted on this por	rtion of the job? Yes N	No					
Additional Actions (Contributing factors conducted):	s may include number of hours at	work prior to failure	or time of day work	being			
Training Procedures:							
Operation Procedures:							
Controller Activities:							
Name	Title	Years Experience	Hours on Duty Prior to Failure	Shift			
Alarm Parameters:							
High/Low Pressure Shutdown:							
Flow Rate:							

Operator/Contractor Error N/A
Procedures for Clearing Alarms:
Type of Alarm:
Company Response Procedures for Abnormal Operations:
Over/Short Line Balance Procedures:
Frequency of Over/Short Line Balance:
Additional Actions:
Additional Actions Taken by the Operator N/A
Make notes regarding the emergency and Failure Investigation Procedures (Pressure reduction, Reinforced Squeeze Off, Clean Up, Use of Evacuators, Line Purging, closing Additional Valves, Double Block and Bleed, Continue Operating downstream Pumps):

#### Photo Documentation (1)

Overall Area from best possible view. Pictures from the four points of the compass. Failed Component, Operator Action, Damages in Area, Address Markings, etc.

Photo No.	Description	Roll No.	Photo No.	Description	Roll No.
1	Description		1	Description	
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
16			16		
17			17		
18			18		
19			19		
20			20		
21			21		
22			22		
23			23		
24			24		
25			25		
26			26		
27			27		
28			28		
29			29		
30			30		

IVne	$\alpha$ t	i amera:
1 1 1	OI.	Camera:

Film ASA:

Video Counter Log (Attach Copy):

Additional Information Sources					
Agency	Name	Title	Phone Number		
Police:					
Fire Dept.:					
State Fire Marshall:					
State Agency:					
NTSB:					
EPA:					
FBI:					
ATF:					
OSHA:					
Insurance Co.:					
FRA:					
MMS:					
Television:					
Newspaper:					
Other:					

Persons Interviewed						
Name	Title	Phone Number				

Event Log					
Sequence of events prior, during, and after the incident by time. (Consider the events of all parties involved in the incident, Fire Department and Police reports, Operator Logs and other government agencies.)					
Time	Event				

Investigation Contact Log				
Time	Date	Name	Description	
			•	

Failure Investigation Documentation Log						
Operator:	Unit #:	CPF #:		Date:		
Appendix	Documentation Description		Date	FO	ΙA	
Number	Documentation Description		Received	Yes	No	

#### Site Description

Provide a sketch of the area including distances from roads, houses, stress inducing factors, pipe configurations, etc. Bar Hole Test Survey Plot should be outlined with concentrations at test points. Photos should be taken from all angles with each photo documented. Additional areas may be needed in any area of this guideline.